

**REMARKS**

Claims 1 through 14 and 20 through 25 are pending. All pending claims are deleted, and new claims 30 through 48 are added. No additional fee for these claims is required.

**1. Sequence Rules Compliance**

The Examiner states that the application does not comply with the rules for sequence compliance. The applicants filed a response including an electronic version of their sequence requirements on April 23, 2001. If these materials were not received by the Examiner, the applicants request that the Examiner contact their attorney by telephone. The materials will be resubmitted.

**2. Specification**

The Examiner objects to the specification for use of the trademark TWEEN 20. Pages 50 and 51 are amended in accordance with the Examiner's suggestion. This objection is believed to be moot.

The Examiner objected to the specification stating the nucleotide sequences appear not to be accompanied with their requisite SEQ ID NO. Again, the applicants believe they complied with this objection by their filing of April 23, 2001.

### 3. Claim Objections

The Examiner objected to the "clean copies" of claims 21 and 24 as containing markings of changes. The new claims submitted by this amendment are believed to be free of such markings.

The Examiner objected to claims 2 and 7 as being "of improper dependent form for failing to further limit the subject matter of a previous claim." The new claims submitted by this amendment are believed to be in a proper format for examination.

### 4. Rejection under 35 U.S.C. § 112

The Examiner rejected claims 1 through 14 and 21 through 25 under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner made specific objections to the language appearing in certain claims. The new claims submitted with this amendment are believed to address each of the Examiner's objections.

Support for the independent claims appears on page 13 at lines 21 through 24, page 14 at lines 11 through 13 and 23 through 25, page 15 at lines 1 through 5, page 25 at lines 11 through 13, and page 26 at lines 15 through 17. Support for independent claims 30 and 33 also appears in the disclosure of the first, ninth, and tenth preferred embodiments. Support

for independent claim 36 also appears in the disclosure of the third, ninth, and tenth preferred embodiments. Support for independent claim 39 also appears in the disclosure of the fourth, ninth, and tenth preferred embodiments. Support for independent claim 42 also appears in the disclosure of the fifth, ninth, and tenth preferred embodiments. Support for independent claim 45 also appears in the disclosure of the first and second preferred embodiments. Support for independent claim 47 also appears in the disclosure of the fifth and eighth preferred embodiments.

Support for dependent claims 31, 34, 37, 40, 43, 46, and 48 appears in the disclosure of the seventh preferred embodiment. This disclosure is primarily on page 49 at lines 16 through 21.

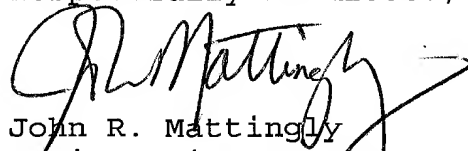
If the Examiner has any further concerns regarding the application of this rejection to the new claims, the applicants request that the Examiner contact their attorney by telephone. This rejection is believed to be moot.

**Conclusion**

Favorable consideration of the application is requested.

The Commissioner is authorized to charge any fees due with this response to Deposit Account No. 50-1417.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "John R. Mattingly", is written over the typed name.

John R. Mattingly  
Registration No. 80,293  
Attorney for Applicants

MATTINGLY, STANGER & MALUR, P.C.  
1800 Diagonal Road, Suite 370  
Alexandria, Virginia 22314  
(703) 684-1120  
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## MARKED UP VERSION OF THE SPECIFICATION

Pages 50 and 51, the paragraph bridging these pages from page 50, line 13, to page 51, line 4, the marked up paragraph is as follows.

Fig. 24 illustrates the procedure of assaying with an assay apparatus. A sample solution containing the DNA fragment group to be measured is put into the DNA cell plate described with reference to different embodiments (for instance a cell formed of the DNA detecting cell base plate 11 and the upper DNA detecting cell plate 12). Then the temperature of the solution is set to be appropriate for hybridization, and the DNA probes and the DNA fragments are hybridized. The temperature at which the hybridization of the DNA probes and the DNA fragments is most efficiently accomplished and non-specific hybridization can hardly take place is determined in advance between 55 and 65°C to be set for the solution. After the hybridizing reaction, DNA fragments not hybridized at normal temperature are discharged out of the DNA detecting cell using as the cleaning solution 20 mM phosphoric acid buffer solution (pH 7.0) to which 0.05% [Tween] TWEEN 20 has been added. TWEEN 200 is a commercially available polysorbate surfactant.